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Γ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	09/447,080	11/22/1999	JOUNG-KYOU PARK	678-335-(P85	3345	
	7:	590 11/08/2002				
	PAUL J FAR	~		EXAMINER		
		VINGTON BOULEVARI)	NGUYEN, F	NGUYEN, FRANCIS N	
	UNIONDALE, NY 11553			ART UNIT	PAPER NUMBER	
				2674		

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	Mc				
· Office Action Summany	09/447,080	PARK ET AL.					
Office Action Summary	Examiner	Art Unit					
The MAILING DATE of this communication and	FRANCIS NGUYEN	2674					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence addre	:55				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status							
1) Responsive to communication(s) filed on 15 M	<u> 1ay 2002 Fax copy</u> .						
2a) ☐ This action is FINAL. 2b) ☑ Th	is action is non-final.						
3) Since this application is in condition for allows			nerits is				
closed in accordance with the practice under Disposition of Claims	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
4) Claim(s) 3 and 4 is/are pending in the applicat	ion.						
4a) Of the above claim(s) is/are withdraw	vn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>3 and 4</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers	_						
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents	s have been received.						
2. Certified copies of the priority documents	s have been received in Applicati	on No					
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
_	14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 							
Attachment(s)	, , ,						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s). Patent Application (PTO-1					

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DETAILED ACTION

Response to Amendment

1. The fax copy Amendment filed on 5/15/02 is entered.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zetts (US Patent 5,404,458) in view of Reference "DSP-based handprinted character recognition" (Texas Instrument application report, October 1994 by Alan Josephson, referred from hereon as Josephson).

As to claim 3, Zetts discloses a character recognition device for recognizing a character input through a touch screen (touch work pad with touch overlay 16 disposed on LCD 18 shown in figure 1, column 4, lines 23-43) comprising:

a touch screen data recorder for storing touch screen data generated from input of a stroke (
(stroke buffer, column 6, lines 60-62, RAM 32 on touch panel adapter card 37 shown in figure 2B), wherein said character is recognized in response to said stroke or in response to a plurality of strokes (step 128 shown in figure 4);

a timer for counting a predetermined waiting threshold time when there is no touch screen data generated (**delay timer**, column 7, lines 55-58, step 126 shown in figure 4);

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a character recognition processor for performing character recognition of the stored touch screen

data (character recognition unit, column 7, lines 65-67).

However, Zetts fails to expressly teach character recognition at each time when each stroke is

input through said touch screen, wherein all the touch screen data are recognized as a single

character when said predetermined waiting threshold time is completely counted. Josephson

teaches performing character recognition of the stored touch screen data at each time when each

stroke is input (as the operator writes on digitized pad, strokes are digitized, normalized,

compared to all strokes in the active stroke data base, page 4, lines 2-6, sequence of strokes

parsed in to set of potential matches, page 4, lines 7-8). Note that Josephson teaches a resistive

X-Y digitizing pad (page 2, last two lines), which is analogous to a touch screen. It would

have been obvious to a person of ordinary skill in the art at the time of the invention to

utilize the apparatus taught by Zetts then modify character recognition software (

application programs 82, column 6, lines 13-14) by accounting each stroke input for

normalization, digitization before comparison routines as taught by Josephson, to obtain

the apparatus Zetts modified by Josephson, because it would increase character

recognition speed as taught by Josephson (page 4, lines 17-18), and enhance resolution of

character recognition.

As to claim 4, note the same citation for claim 3. The character recognition device wherein said

touch screen recorder and character recognition processor are designed to have multitasking

functions (Zetts, application in a multi-tasking computer system, column 10, lines 5-6, not

wasting processing time to switch between a currently executed thread to timer thread,

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column 10, lines 19-22, also see Josephson, **DSP** incrementally process the strokes as they arrive from host by performing partial recognition results, page 4, lines 25-28, real time operating system with facilities for multitasking, page 3, lines 17-18) thereby performing the corresponding function when a touch screen data is generated and stored.

Response to Arguments

- 3. Applicant's arguments with respect to claims 3 and 4 have been considered but are moot in view of the new ground(s) of rejection.
- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached at 703 305-4579.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service whose telephone number is (703) 306-0377.

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FN

October 22nd, 2002

FRANCIS N NGUYEN

Examiner

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